REMARKS/ARGUMENTS

Claims 1-36 are pending in the application. Claims 1-34 stand rejected. Claims 1, 7, 11-12, 18, 22-23, 29, and 33 stand rejected under 35 USC §103(a) as being unpatentable over U.S. patent No. 5,875,345 (Naito) in view of U.S. patent No. 5,664,097 (Johnson_097). Claims 2, 13, and 24 rejected under 35 USC §103(a) as being unpatentable over Naito in view of Johnson_097 as applied to claims 1, 12, and 23 above and further in view of U.S. Patent No. 5,682,475 (Johnson_475). Claims 3-6, 14-17, and 25-28 are rejected under 35 USC §103(a) as been unpatentable over Naito in view of Johnson_097 as applied to claims 1, 12, and 23 above, and further in view of "System Mode Transition with Notification and Adoption," IBM Technical Disclosure Bulletin, September 1995, Vol. 38, Issue No. 9, pp. 153-154 (IBM). Claims 8-10, 19-21, and 30-32 are rejected under 35 USC §103(a) as been unpatentable over Naito in view of Johnson-097 as applied to claims 7, 18, and 29 above and further in view of U.S. Patent No. 6,209,104 (Jalili). Claim 34 is rejected under 35 USC §103(a) as being unpatentable over Naito in view of Johnson_097 as applied to claim 29 above, and further in view of U.S. Patent No. 6,282,553 (Flickner). Claims 35 and 36 are new and supported by, for example, the summary of the invention on page 2 and claim 7. No new matter has been added.

Rejection of Claims under 35 U.S.C. §103(a)

Claims 1, 7, 11-12, 18, 22-23, 29, and 33 stand rejected under 35 USC §103(a) as being unpatentable over U.S. patent No. 5,875,345 (Naito) in view of U.S. patent No. 5,664,097 (Johnson_097). Regarding claims 1, 12, and 23, Naito fails to teach or suggest continuing the operating session if the user performs an **authentication-update process** within a second

predetermined time period after the operating session is suspended, and continuing the operating session if the user performs the **authentication process** after the operating session is suspended in the second predetermined time period is exceeded. In contrast, Naito teaches that the "second predetermined time is a reference period of time for determining whether or not a password input should be requested before recovering the task, and is called a 'security time'" (col. 4, lines 24-28). Thus, the second predetermined time of Naito is used for determining **whether to perform an authentication process**, and is **not** used to determine **whether an authentication has been performed.**

The office action of July 23, 2004 alleges that Johnson_097 teaches voice recognition method for delaying the activation of inactivity security mechanism, thereby eliminating the need for keyboard password authentication when the user inputs a predetermined audio signal when the time limit of a security mechanism is about to expire. The office action further asserts that inputting the predetermined audio signal is understood to be an authentication-update process. Applicant respectfully disagrees.

The IEEE Standard Dictionary of Electrical and Electronics Terms (1996) defines authentication as: "The process of validating a user or process to verify that the user or process is not a counterfeit." The IEEE Dictionary also defines "update" as: "The process of modifying or re-establishing data with more recent information." Accordingly, the authentication-update process entails, for example, modifying or re-establishing data used by the process of validating a user or process to verify that the user or process is not a counterfeit.

The voice recognition system as taught by Johnson_097 cannot be used for authentication updates because the "stored samples of valid user inputs" (col. 4, line 28) are used to "decide if an input on the voice input device 21 is a user input or non-user input (such as a background voice on the voice recognition device)" (col. 4, lines 22-25). This does not (in the absence of the applicant's own teaching) teach or suggest an authentication process, much less an authentication-update process, because the voice recognition system does not distinguish between users (which is at the minimum suggested by authentication).

Accordingly, delaying the activation of the security mechanism (whether by voice for keyboard inputs) does not, for example, validate the user to verify whether the user is a counterfeit. Instead, delaying the security mechanism actually makes the system less secure, not more secure. Making the system less secure teaches away from the present invention because the lessened security is the opposite result of the intended effect of authentication and authentication updates (which is to make the system more secure). As is even recognized by the office action (p. 4, line 15), Naito itself teaches away from this position:

> "So, if a password input operation is eliminated, the resuming operation can be completed in a moment and the task can be instantaneously recovered. It is, however, improbable that the requirement for the input of a password will be removed under the present conditions were the need for improved system security is constantly stressed" (Naito, col. 3, lines 37-40).

Accordingly, Johnson_097 does not teach or suggest an authentication-update process. Johnson_097 merely teaches allowing an alternate input device (such as a voice recognition

device) to be used with a security input device (such as a keyboard) such that the input from the
alternate input device emulates an input from security input device for the purpose of delaying
the activation of an inactivity security mechanism (col. 2, lines 35-44). Thus, Johnson_097 does
not teach an **authentication procedure** (which determines, for example, the identity of a user),
but rather teaches a **delay of an inactivity security mechanism** (such as a lockout after a period
of time expires).

The office action asserts that it would have been obvious to one of ordinary skill in the art
to modify the system of Naito so as to include an authentication process by delaying locking up
of a user interface as for teachings of Johnson_097 because one would have been motivated to
make such the modification in view of the (alleged) suggestion in Naito that in a system wherein
improve security is stressed, authentication could be necessary, because this incorporation
further improve system security. Applicant traverses this assertion because **merely delaying the
suspension process itself** does not improve the system security as taught by Naito.

As discussed above, the primary and secondary references both fail to teach a second
predetermined time period that relates to an authentication-update process, and do not singly or
in a motivated combination anticipate the limitations of claims 1, 12, and 13. Accordingly,
claims 1, 12, 13 are not obvious over Naito in view of Johnson_097 and are submitted to be
allowable.

Regarding claims 7, 18, and 29, Naito in view of Johnson_097 fails to teach performing
an authentication-update process comprising inputting a predetermined signal to the user-
operated device within the second predetermined time period. Instead, Johnson_097 teaches
registering an alternate input device that allows for the continued disabling of a security

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mechanism (col. 3, lines 61-67). The registration process involves using a secured input device to register an (unregistered) input device, wherein a threshold value is used to decide if input from the voice input device is the user input or non-user input (such as background noise on the voice recognition device) (col. 4, lines 1-25). This registration process is **not an authentication** process because it does not **authenticate** a particular user, but instead merely **distinguishes between an arbitrary** user and background noises.

The office action asserts that Johnson_097 teaches a "predetermined voice signal" that is used in an authentication-update process. Applicant respectfully disagrees because the "stored samples of valid user inputs" (col. 4, line 28) are used to "decide if an input on the voice input device 21 is a user input or non-user input (such as a background voice on the voice recognition device)" (col. 4, lines 22-25). The "stored samples of valid user inputs" are merely **samples** and are thus in no way suggested or taught to be predetermined.

When not viewed in the light of the applicant's own teaching, Johnson_097 **teaches away** from using an authentication process because the registration process of Johnson_097 merely allows a secondary device to be used to delay the activation of the inactivity security mechanism, and does not in any way authenticate a user. In other words, the "predetermined signal" of Johnson_097 can only be used to determine the **presence** of a user at a terminal, but cannot be used to determine the **identity** of that user, and thus is not an authentication process.

As discussed above, the primary and secondary references both fail to teach a second predetermined signal that relates to an authentication-update process, and do not singly or in a motivated combination anticipate the limitations of claims 7, 18, and 29. Accordingly, claims 7, 18, and 29 are not obvious over Naito in view of Johnson_097 and are submitted to be allowable.

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Regarding claims 11, 22, and 33, Naito in view of Johnson_097 fails to teach performing an authentication-update process comprising input in a predetermined audio voice signal to the user-operated device within the second predetermined time period. As discussed above with regards to claims 7, 18, and 29, Naito in view of Johnson_097 merely uses a voice recognition system to determine the presence of the user, and fails to authenticate the user as recited by the instant claims.

As discussed above, the primary and secondary references both fail to teach a second predetermined signal that relates to an authentication-update process, and do not singly or in a motivated combination anticipate the limitations of claims 11, 22, and 33. Accordingly, claims 11, 22, and 33 are not obvious over Naito in view of Johnson_097 and are submitted to be allowable.

Claims 2, 13, and 24 stand rejected under 35 USC §103(a) as being unpatentable over Naito in view of Johnson_097 as applied to claims 1, 12, and 23 above and further in view of U.S. Patent No. 5,682,475 (Johnson_475). Claims 2, 13, and 24 are allowable at least because of the reasons of allowability given for the claims above from which claims 2, 13, and 24 depend. Accordingly, claims 2, 13, and 24 are not obvious over Naito in view of Johnson_097 as applied to claims 1, 12, and 23 above and further in view Johnson_475 and are submitted to be allowable.

Claims 3-6, 14-17, and 25-28 stand rejected under 35 USC §103(a) as been unpatentable over Naito in view of Johnson_097 as applied to claims 1, 12, and 23 above, and further in view of "System Mode Transition with Notification and Adoption," IBM Technical Disclosure Bulletin, September 1995, Vol. 38, Issue No. 9, pp. 153-154 (IBM). Claims 3-6, 14-17, and 25-

28 are allowable at least because of the reasons for allowability given for the claims above from which claims 3-6, 14-17, and 25-28 depend.

Claims 8-10, 19-21, and 30-32 are rejected under 35 USC §103(a) as been unpatentable over Naito in view of Johnson_097 as applied to claims 7, 18, and 29 above and further in view of U.S. Patent No. 6,209,104 (Jalili). As discussed above, Naito in view Johnson_097 fails to teach or suggest continuing the operating session if the user performs an **authentication-update process** within a second predetermined time period after the operating session is suspended, and wherein the authentication update process comprises inputting a predetermined signal to the user-operated device within the second predetermined time period. In contrast, Jalili merely teaches a method of secure data entry wherein data is inputted by selecting points on or approximate to the icons (col. 3, lines 1-19) such that the server subsystem is able to determine the input data from the user without directly exposing that data to observation or interception (col. 3, lines 19-23).

The office action asserts that would been obvious to one having ordinary skill in the art at the time the invention was made to further modify the combination of Naito in view of Johnson_097 so as to include the visual authentication process as taught by Jalili because this modification provides a system that is not easily susceptible to the over-the-shoulder problem. Applicant traverses this assertion because as discussed above, Naito in view of Johnson 97 fails to teach (or suggest) an authentication update process within a second predetermined time period using a predetermined signal for authentication.

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Furthermore, Jalili also fails to teach or suggest an authentication-update process within a second predetermined time period using a predetermined signal for authentication. Jalili teaches away from the present invention, because it presents a method of entering data using icons, for example, in a non-standard format (see Fig. 4 of Jalili), which **obfuscates data entry to both the user and to the passers-by**, and because the authentication-update process generally provides a more easily used interface as compared with a userid/password entry combination. (In other words, Jalili makes entering authentication information more difficult for the user, and the instant invention generally makes entering such information easier, albeit the information is entered in a different context).

As discussed above, the primary and secondary references both fail to teach a an authentication-update process within a second predetermined time period using a predetermined signal for authentication, and do not singly or in a motivated combination anticipate the limitations of claims 8-10, 19-21, and 30-32. Accordingly, claims 8-10, 19-21, and 30-32 are not obvious in view of the cited art and are submitted to be allowable.

Claim 34 stands rejected under 35 USC §103(a) as being unpatentable over Naito in view of Johnson_097 as applied to claim 29 above, and further in view of U.S. Patent No. 6,282,553 (Flickner). As discussed above, Naito in view Johnson_097 fails to teach or suggest continuing the operating session if the user performs an **authentication-update process** within a second predetermined time period after the operating session is suspended, and wherein the authentication update process comprises inputting a predetermined signal to the user-operated device within the second predetermined time period. In contrast, Flickner merely teaches a
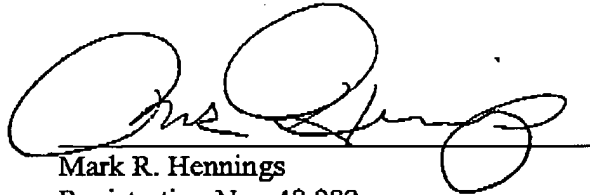
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computer-implemented method for gaze-assisted number generating including operating a gaze tracking apparatus to monitor eye operation of the computer operator as the operator views a virtual keypad having a plurality of keys.

The office action asserts that would been obvious to one having ordinary skill in the art at the time the invention was made to further modify the combination of Naito and Johnson_097 so as to include gaze-based authentication processes for the teachings of Flickner because it is advantageous to use gaze-based authentication because it is accurate and inexpensive. Applicant traverses this assertion because none of the primary, secondary, or tertiary, references, either singly, or in motivated combination, teach or suggest an **authentication-update process** within a second predetermined time period after the operating session is suspended, and wherein the authentication update process comprises inputting a predetermined signal to the user-operated device within the second predetermined time period. Accordingly Claim 34 is not rendered obvious by the prior art and a submitted to be allowable.

In view of the foregoing amendments and remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicant at the telephone number provided below.

Respectfully submitted,

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